

CLAIMS:

1. A method of manufacturing an electronic device comprising the steps of:
providing a substrate having a first layer of an electroconductive material, in
which layer conductors are or will be defined in accordance with a desired pattern;
providing a foil having a second patterned layer of electroconductive material,
5 in which layer conductors are defined in accordance with a desired pattern;
providing elements, including a semiconductor element and a first connection
element, on a first side of the substrate, thereby bringing at least two of the said elements, one
of which is the first connection element, and corresponding conductors in the first layer into
electric contact;
10 providing the foil on either side of the elements, thereby establishing electric
contact between at least the two elements and the corresponding conductors in the second
layer;
providing a passivating material from the second side of the semiconductor
element through the foil, which passivating material forms an encapsulation of the elements;
15 and
separating the assembly of substrate, encapsulation and second conductive
layer, thereby forming the electronic device.
2. A method as claimed in claim 1, characterized in that the foil comprises a
20 detachable layer which is removed after the foil has been provided on the second side of the
semiconductor element.
3. A method as claimed in claim 1, characterized in that the foil comprises a
patterned, electrically isolating layer, the foil being provided in such a manner that the second
25 patterned layer faces the elements.
4. A method as claimed in claim 1, characterized in that the foil comprises an
electrically isolating gauze, the foil being provided in such a manner that the second
patterned layer faces the elements.

5. A method as claimed in claim 1, characterized in that a substrate is used in which the connection conductors are already defined in the first layer.

5 6. A method as claimed in claim 5, characterized in that the substrate comprises a sacrificial layer which is at least partly removed after the provision of the passivating material.

7. A method as claimed in claim 1 or 5, characterized in that the passivating
10 material also encapsulates the second patterned layer, and that the substrate has contact faces for external contacting which are situated on a second side facing away from the first side.

8. An electronic device with a first side and a second, opposite side that is provided with a semiconductor element having a first and a second connection region that is
15 situated between a first and a second patterned layer of electrically conductive material on, respectively, the first and the second side, which patterned layers are electrically interconnected via at least a first connection element, conductors being defined in accordance with desired patterns in said layers, and the semiconductor element being electrically
20 connected with conductors in at least one of said layers by the connecting regions, said device being provided, on the first side, with contact faces for external contacting, said contact faces being electroconductively connected with at least a part of the conductors in the first patterned layer, said elements and said second patterned layer being at least substantially encapsulated by an encapsulation of passivating material.

25 9. An electronic device as claimed in claim 8, characterized in that the second conductive layer is provided, on the side facing away from the elements, with a patterned isolating layer.

10. An electronic device as claimed in claim 8, characterized in that the second
30 conductive layer is provided, on the side facing away from the elements, with a gauze of isolating material.

11. A foil comprising a patterned, electrically isolating carrier layer and a patterned, electrically conductive layer, which patterns of the layers are different.

12. A foil as claimed in claim 11, characterized in that the isolating carrier layer is a gauze.